

In the claims:

34. (AMENDED TWICE) A split-gate flash memory having a non-smiling trench

isolation comprising:

a substrate;

a first gate oxide layer atop the substrate;

a floating gate atop the gate oxide layer;

a trench formed through the floating gate and gate oxide layers into the substrate wherein the vertical surfaces of the floating gate, the gate oxide layer and the substrate form interior trench walls;

two conformal layers lining the interior trench walls, wherein a first conformal layer comprises oxide having a thickness between about 200 to 550 Å, and a second conformal layer comprises nitride having a thickness between about 100 to 300 Å;

a second gate oxide; and

a control gate atop the second gate oxide.